

ADJUSTMENT, ENVIRONMENT, AND AGING

Method development and psychological assessment of retired
persons in five living areas in southern Sweden

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Title and subtitle ADJUSTMENT, ENVIRONMENT, AND AGING: Method development and psychological assessment of retired persons in five living areas in southern Sweden.		
Abstract The dissertation is comprised of three reports. The first report concerns an adaptation of McKech-nie's (1974) Environmental Response Inventory (ERI) to Swedish conditions. For the Swedish version, six of the original instrument's eight scales were replicated. These were Stimulus Seeking, Urban-ism, Antiquarianism, Mechanical Orientation, Need for Privacy, and Environmental Trust. The Swedish scales retained approximately half the items from the original scales. Focusing on the six replicated scales, data from a mixed sample (students, occupational groups, and retirees; N=313) is presented as a beginning validation of the Swedish version. Swedish ERI results for demographic variables (age and sex) as well as educational/vocational background were for the most part in agreement with American ERI data and German ERI data (Espe 1984). The second report presents a newly developed projective technique which compares older persons' responses to a selection of drawings containing real-life conflicts. The technique's administration and scoring system combines both spontaneous and probe stages in an effort to elicit a subject's acknowledgement of problems, pro-jection of emotions on the hero-figures, and solutions for conflicts seen in the drawings. The report focuses on the development and the first study with the technique which was concerned with the evaluation of ten scoring dimensions as well as the relative effectiveness of the twelve stim-ulus drawings. The data comes from 99 pensioners (age 60-70) who were divided according to living environment, sex, and personal adjustment. It is concluded that in combining principles from pro-jective testing with a more reality-based model from environmental psychology (Küller 1976, 1984), the technique can provide a unique type of information, hopefully adding to the understanding of older persons' functioning in everyday problem-solving situations. The third report is based on an assessment of 115 retired persons (age 60-70) who were selected from a larger study concerned with retirement patterns in southern Sweden (Küller, forthcoming). The study's principle aims were to investigate adjustment in older age and to identify patterns of personal competence using Q-factor analysis. Subjects' personal competence was assessed in several domains; e.g., physiology, person-ality, creativity, cognition, emotional processing and problem solving, etc. The results showed the urban females to be least well adjusted. Although the rural subjects were generally better adjusted in comparison to the urban, their competence, especially the rural males, was lower. Other-wise, better adjusted subjects revealed higher competence across many of the testing domains. The cluster analysis revealed several interpretable competence patterns. For the females, two of the most interesting clusters consisted of well adjusted wives from the rural areas and a less well adjusted group who scored high on the cognitive and creativity measures. For the males, three versions of good adjustment were revealed. These were interpreted as "big city extroversion", "healthy country living", and "small city self-actualization".		
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JAMES R. WATZKE

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ADJUSTMENT, ENVIRONMENT, AND AGING

METHOD DEVELOPMENT AND PSYCHOLOGICAL ASSESSMENT OF RETIRED PERSONS FROM FIVE LIVING AREAS IN SOUTHERN SWEDEN.

In its most general sense, the present dissertation falls under the field of AGING. Aging as a scientific field has expanded and is continuing to expand at a formidable rate. This increasing attention is easily explained by the changing demographic structure of most western countries, i.e., the number of older persons is increasing and will continue to do so in the future. The learning institutions and funding agencies in a society usually reflect the degree of interest in a subject in the society at a given time, e.g., the interest in social unrest research of the 60's, energy research of the 70's, etc. Such is the case for aging in the 80's.

An increased interest in aging and the study of older persons has dictated a greater concern for methods which are suitable for the older aged research subject. It cannot be assumed that an inventory, scale, or technique which has shown good validity with younger subjects will do the same for pensioners. A second issue concerns the variety of methods which are available for studying older persons. As the interest in older persons grows so does the need for the comprehensive assessment of their personal competence, lifestyle, and social and physical environment. Such assessments can be enhanced by the availability of an assortment of instruments covering a large number of testing domains. The present work had two major goals: The exploration of personal competence and its relation to well-being and adjustment in older age and the development of methods which might prove useful for future research with the elderly.

The dissertation is comprised of three reports. The first report concerns the adaptation of the Environmental Response Inventory (McKechnie 1974) to Swedish conditions. This inventory attempts to measure persons' attitudes toward the personal, social, and physical environment. The second report presents a newly developed projective technique designed to compare older person's responses to a selection of real-life situations containing potential conflicts. The third report features an in-depth psychological assessment of 115 retired persons coming from different living environments. The assessment battery used twelve measurements, two of which were those featured in reports 1 and 2 of the dissertation.

Report 1: A Swedish version of the Environmental Response Inventory

An attempt was made to adapt McKechnie's (1974) Environmental Response Inventory (ERI) to Swedish conditions. Using both correlational and factor analysis, six of the original instrument's eight environmental attitude scales were replicated. These were:

SS (Stimulus Seeking). Interest in travel and exploration of unusual places; enjoyment of complex and intense physical sensations; breadth of interests.

UR (Urbanism). Enjoyment of high density living; appreciation of unusual and varied stimulus patterns of the city; interest in cultural life; enjoyment of interpersonal richness and diversity.

AN (Antiquarianism). Enjoyment of antiques and historical places; preference for traditional vs. modern design; aesthetic sensitivity to man-made environments and to landscape; appreciation of cultural artifacts of earlier eras; tendency to collect objects for their emotional significance.

MO (Mechanical Orientation). Interest in mechanics in its various forms; enjoyment in working with one's hands; interest in technological processes and basic principles of science; appreciation of the functional properties of objects.

NP (Need for Privacy). Need for physical isolation from stimuli; enjoyment of solitude; dislike of neighboring; need for freedom from distraction.

ET (Environmental Trust). General environmental openness, responsiveness, and trust; competence in finding one's way about the environment vs. fear of potentially dangerous environments; security of home; fear of being alone and unprotected.

The resulting Swedish scales retained approximately half the items from the original scales.

Focusing on the six replicated scales, data from a mixed sample (university students, various occupational groups, and retirees, $N=313$) is presented as a beginning validation of the Swedish version. Swedish ERI results for demographic variables (age and sex) as well as educational/vocational background were for the most part in agreement with American ERI data (McKech-nie 1974) and German ERI data (Espe 1984). The significant findings for age and sex were as follows. Younger persons scored higher in Stimulus Seeking and Environmental Trust, while older aged subjects scored higher in Need for Privacy. For sex, females were higher in Antiquarianism, whereas males were higher in Mechanical Orientation and Environmental Trust.

In order to check the usefulness of the Swedish ERI for testing older persons, separate analyses were conducted with the retirees subsample ($N=115$). These subjects were classified according to living area (urban vs. rural), sex, and adjustment to aging. ANOVA of factor scores for the retirees revealed the same effects for sex as with the total sample, only males also scored significantly higher in Stimulus Seeking. For living area, the urban pensioners, as expected, scored higher in Urbanism. Regarding the

adjustment variable, as hypothesized, better adjusted pensioners scored higher in Environmental Trust in comparison to their less well adjusted counterparts.

Because the subsample of pensioners had participated in the assessment study mentioned above, it was possible to investigate the correlations between the scores on the ERI and other variables. The most interesting significant correlations were the following. Stimulus Seeking was positively related to Extroversion. Mechanical Orientation was related to Spatial Reasoning. For Need for Privacy, two correlations were revealed; one with Neuroticism and the other with higher emotional Strain. Finally, greater Environmental Trust was negatively related to the subject's age and positively related to the need of having friends around. The two correlations with Environmental Trust were interpreted as effects of older age and increased feelings of physical vulnerability.

In conclusion, a positive evaluation of the Swedish version of the Environmental Response Inventory is given based on the theoretical and manifest sense of the results from the study. Those results suggest that the Swedish scales are potentially useful for testing a wide variety of persons, from young university students to retired farmers.

Report 2: The Conflict Situations Technique: A projective method for elderly persons.

The Conflict Situations Technique is a projective method which presents drawings of a group of real-life situations containing potential conflicts

of special relevance for retired persons, e.g., 'meeting authority figures, making contact with the opposite sex, and finding a seat on a crowded bus'. There have been other efforts to tailor TAT type methods to the elderly subject (see, e.g., Wolk 1966, Bellak 1973). The present technique's administration and scoring system combines both spontaneous and probe stages in an effort to investigate the subjects' acknowledgement of problems, projections of emotions on the hero-figures, as well as their ability to generate solutions for conflicts seen in the drawings. Furthermore, at the end of the session the technique requires each subject to rank the drawings for their pleasantness on a semantic scale.

The report focuses on the development and the first study with the technique which was concerned with the evaluation of the 10 scoring dimensions from the technique. The data comes from 99 pensioners (age 60-70) who were divided according to living environment (urban vs. rural), sex, and personal adjustment to aging. Five of the ten scoring dimensions revealed significant differences according to ANOVA. These are summarized as follows.

First, for living environment, the urban group used a greater number of first-person pronouns (identifications) while responding to the drawings; this was interpreted as evidence of their greater experience with the situations represented by the drawings. The females also offered more identifications which was taken as evidence of the females' greater comfort with the verbal nature of the technique. For adjustment, there were four significant results. The better adjusted acknowledged more problems in the drawings, projected a greater number of positive emotions upon the hero-figures, and generated a higher percentage of solutions for those problems acknowledged in the drawings. Furthermore, when asked to rank the

drawings for their pleasantness on the semantic scale, the better adjusted gave fewer ratings below the total sample's mean (deflated pleasantness ratings).

Most of the results from the technique, especially those between better and less well adjusted pensioners, are interpreted as supportive of hypotheses stemming from a model of man-environment interaction and emotional control (Küller 1976, 1984). In conclusion, it is argued that the technique combines some of the most attractive aspects of projective testing, e.g., stimulus apperception and the operation of ego defense mechanisms, with a more reality-based perspective, e.g., extracting responses which involve social and environmental perception. Furthermore, the technique requires the subject to offer behavioral solutions to real problems. The analysis of these data, which might be termed environmental control strategies, are hoped to better illuminate how older aged persons function in everyday problem-solving situations.

Report 3: The psychological assessment of Swedish retired persons coming from urban and non-urban environments

The third report focuses on questions of well-being and adjustment in older age. It is based on an in-depth assessment of 115 retired persons (age 60-70) who were selected from a larger study concerned with the retirement of persons from five different living environments in southern Sweden (Küller, forthcoming). These living areas can be labeled as:

1. large city, outlying highrise

2. large city, central lowrise
3. small city, central lowrise
4. agricultural, single family
5. peninsula/archipelago, single family

The study had three aims. The first was to develop a subjective scale to measure adjustment to older age. The results supported a positive appraisal of the 21-item adjustment scale. Its three highest loaded items were self-rated health, feeling happy vs. sad, and feeling secure vs. anxious, which were in accordance with other established scales measuring well-being in older age (Lawton et al. 1984). Scores on the adjustment scale revealed three clear results. First, the females from the large city areas scored least well adjusted of all groups. Second, females from the three urban areas scored less well adjusted than their male counterparts, however, when it came to the two non-urban areas, no visible differences were revealed between the sexes. Third, the group from the peninsula/archipelago area scored most positively adjusted of all.

The second aim of the study was to investigate the relations between adjustment to aging (as determined by the adjustment scale described above) and the personal competence of the pensioners; emphasis was placed on differences in sex and living area. The subjects' personal competence was assessed by twelve measures in the following domains: physiology, personality, creativity, cognition, emotional processing and problem solving, environmental attitudes, attention-stress, and time-budgeting. Of the twelve measures, five were original, or had never been used with older aged subjects. Except for the creativity measures, these new measures were

given favorable evaluations from the present study.

The results for adjustment and personal competence showed the urban females to be least well adjusted, the measures of Neuroticism and Environmental Trust were offered as the best explanations in the assessment data for their poorer adjustment. Although the rural subjects were generally better adjusted in comparison to the urban, their competence, especially the rural males, was lower. This was interpreted in terms of Lawton's model of environmental adaptation (Lawton & Nahemow 1973). Otherwise, better adjusted subjects revealed higher competence across many of the testing domains but there was evidence of a higher range of adjustment between the persons from the urban areas in comparison to those from the rural.

The third and final aim of the study was to describe so called patterns of personal competence. Towards this goal, a Q-factor analysis was performed to reveal clusters of subjects in the sample who displayed similar response patterns across the data. This is similar to the well known studies by Reichard et al. (1962) and Neugarten et al. (1968) where 'retirement types or strategies' were extracted. A qualitative presentation of these results was given in an attempt of humanize and reveal a finer tuned picture of general results from the study. The interpretation and discussion of the resulting clusters were aided by time-budget data collected from each subject.

The cluster analysis revealed several interpretable competence patterns. Concerning the females, two of the most interesting clusters consisted of well adjusted wives from the rural areas and a less well adjusted group who showed high competence on the cognitive and creativity measures.

For the males, the most interesting clusters revealed three versions of good adjustment in older age. These were interpreted as "big city extro-version", "healthy country living", and "small city self-actualization". Furthermore, interpretable clusters representing important minorities in the sample were revealed and are presented, e.g., widows and never-marrieds.

The conclusions from the report focus on issues of physical health and well-being in older age, the necessity of more comprehensive assessment studies of female pensioners from big city environments, and the value of cluster analysis as a statistical method. Furthermore, it is argued that simple conclusions about adjustment and well-being in Swedish pensioners are not justified, especially concerning general differences between males and females or those living in one environment or another. However, when it comes to the more detailed competence patterns presented in the report, it is claimed that many of them probably can be generalized to samples beyond those in the present study.



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